

# **A METHOD AND A SYSTEM FOR CERTIFICATE REVOCATION LIST CONSOLIDATION AND ACCESS**

3 ABSTRACT

4 This invention discloses methods and systems for certificate  
5 revocation list (CRL) consolidation and access. In an example  
6 embodiment, the system comprises: a plurality of certificate  
7 authorities (CAs); a plurality of CRL retrieval agents associated  
8 with CRL distribution mechanisms of CAs, for consolidating the CRLs  
9 from multiple CAs; CRL databases, for storing the consolidated CRLs  
10 from multiple CRL retrieval agents and the replication of CRLs; and  
11 CRL access API. Therefore, an application can access the nearest  
12 CRL database to determine whether a digital certificate has been  
13 revoked via a set of unified APIs without bothering the detailed of  
14 CRL distribution mechanisms. In addition, the system of the  
15 invention is also adapted for consolidating and accessing all kinds  
16 of black lists.